

ABSTRACT

A method for of reducing the acidity and lowering the acid dewpoint of flue gas, the method steps including partially combusting the fuel in a first stage to create a reducing environment; maintaining the reducing environment for a sufficient time period
5 such that reducible acids are reduced to achieve a desirable acidity concentration in the flue gas; and combusting the remainder of the fuel and combustion intermediates in a second stage with oxidizing environment; thereby decreasing the acidity and lowering the acid dewpoint of the flue gas by reducing the acid concentration of the gas.